

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (cancelled).
2. (previously presented): An inter-image operation method according to claim 70, wherein the history data on the past inter-image operations are recorded in a designated recording medium.
3. (previously presented): An inter-image operation method according to claim 70, wherein the history data on the past inter-image operations are also attached to the processed image data obtained through the inter-image operation.
4. (cancelled).
5. (previously presented): An inter-image operation method according to claim 70, wherein the history data on the past inter-image operations include information identifying the base images each represented by one of said two or more sets of the base image data used for calculating the processed image data.

6. (original): An inter-image operation method according to claim 5, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

7. (previously presented): An inter-image operation method according to claim 5, wherein the history data on the past inter-image operations are also attached to the processed image data obtained through the inter-image operation.

8. (cancelled).

9. (previously presented): An inter-image operation method according to claim 70, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

10. (original): An inter-image operation method according to claim 9, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

11. (previously presented): An inter-image operation method according to claim 9, wherein the history data on the past inter-image operations are also attached to the processed image data obtained through the inter-image operation.

12. (cancelled).

13. (original): An inter-image operation method according to claim 9, wherein the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if it was found by referring to the history data that the desired set of processed image data had already been obtained.

14. (original): An inter-image operation method according to claim 13, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

15. (previously presented): An inter-image operation method according to claim 13, wherein the history data on the past inter-image operations are also attached to the processed image data obtained through the inter-image operation.

16. (cancelled).

17. (original): An inter-image operation method according to claim 5, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

18. (original): An inter-image operation method according to claim 17, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

19. (previously presented): An inter-image operation method according to claim 17, wherein the history data on the past inter-image operations are also attached to the processed image data obtained through the inter-image operation.

20. (cancelled).

21. (original): An inter-image operation method according to claim 17, wherein the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if it was found by referring to the history data that the desired set of processed image data had already been obtained.

22. (original): An inter-image operation method according to claim 21, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

23. (previously presented): An inter-image operation method according to claim 21, wherein the history data on the past inter-image operations are also attached to the processed image data obtained through the inter-image operation.

24. (cancelled).

25. (previously presented): An inter-image operation method according to claim 70, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data.

26. (previously presented): An inter-image operation method according to claim 70, wherein each of said two or more sets of the base image data is a set of data representing an original image.

27. (previously presented): An inter-image operation method according to claim 70, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein each of said two or more sets of the base image data is a set of data representing an original image.

28. (previously presented): An inter-image operation method according to claim 70, wherein the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

29. (previously presented): An inter-image operation method according to claim 70, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

30. (previously presented): An inter-image operation method according to claim 70, wherein each of said two or more sets of the base image data represents a radiation image for medical use.

31. (previously presented): An inter-image operation method according to claim 70, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein each of said two or more sets of the base image data represents a radiation image for medical use.

32. (cancelled).

33. (previously presented): An inter-image operation apparatus according to claim 73, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

34. (previously presented): An inter-image operation apparatus according to claim 73, wherein the means for attaching the history data to the stored two or more sets of base image data also attaches the history data to the processed image data obtained through the inter-image operation.

35. (cancelled).

36. (previously presented): An inter-image operation apparatus according to claim 73, wherein the history data on the past inter-image operations include information identifying the base images each represented by one of said two or more sets of the base image data used for calculating the processed image data.

37. (original): An inter-image operation apparatus according to claim 36, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

38. (previously presented): An inter-image operation apparatus according to claim 36, wherein the means for attaching history data to the stored two or more sets of base image data also attaches the history data to the processed image data obtained through the inter-image operation.

39. (cancelled).

40. (previously presented): An inter-image operation apparatus according to claim 73, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

41. (original): An inter-image operation apparatus according to claim 40, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

42. (previously presented): An inter-image operation apparatus according to claim 40, wherein the means for attaching the history data to the stored two or more sets of base image data also attaches the history data to the processed image data obtained through the inter-image operation.

43. (cancelled).



44. (original): An inter-image operation apparatus according to claim 40, wherein the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if the inter-image operation means found by referring to the history data, that the desired set of processed image data had already been obtained.

45. (original): An inter-image operation apparatus according to claim 44, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

46. (previously presented): An inter-image operation apparatus according to claim 44, wherein the means for attaching the history data to the stored two or more sets of base image data also attaches the history data to the processed image data obtained through the inter-image operation.

47. (cancelled).

48. (original): An inter-image operation apparatus according to claim 36, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

49. (original): An inter-image operation apparatus according to claim 48, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

50. (previously presented): An inter-image operation apparatus according to claim 48, wherein the means for attaching the history data to the stored two or more sets of base image data also attaches the history data to the processed image data obtained through the inter-image operation.

51. (cancelled).

52. (original): An inter-image operation apparatus according to claim 48, wherein the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if the inter-image operation

means found by referring to the history data that the desired set of processed image data had already been obtained.

53. (original): An inter-image operation apparatus according to claim 52, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

54. (previously presented): An inter-image operation apparatus according to claim 52, wherein the means for attaching the history data to the stored two or more sets of stored base image data also attaches the history data to the processed image data obtained through the inter-image operation.

55. (cancelled).

56. (previously presented): An inter-image operation apparatus according to claim 73, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data.

57. (previously presented): An inter-image operation apparatus according to claim 73, wherein each of said two or more sets of the base image data is a set of data representing an original image.

58. (previously presented): An inter-image operation apparatus according to claim 73, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein each of said two or more sets of the base image data is a set of data representing an original image.

59. (previously presented): An inter-image operation apparatus according to claim 73, wherein the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

60. (previously presented): An inter-image operation apparatus according to claim 73, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

61. (previously presented): An inter-image operation apparatus according to claim 73, wherein each of said two or more sets of the base image data represents a radiation image for medical use.

62. (previously presented): An inter-image operation apparatus according to claim 73, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein each of said two or more sets of the base image data represents a radiation image for medical use.

63. (cancelled).

64. (cancelled).

65 (previously presented). The apparatus of claim 73, wherein the history data recording means comprises a database which stores the history data and the base image data.

66 (previously presented). The apparatus of claim 73, wherein the history data comprises at least one of: data indicating whether or not inter-image operations of the base image data have been carried out, names for the base image data, a name of a patient of corresponding base image data, a date of taking the base image data, and an ID number of the patient.

67 (previously presented). The apparatus of claim 65 wherein the history data includes header information indicating that inter-image operation of the base image data has been carried out.

68 (previously presented). The apparatus of claim 67, wherein the inter-image operation means searches the database by the header information to determine whether the inter-image operation has been carried out, and retrieving the inter-image operation from the database when the header information that the inter-image operation has been carried out to provide the processed image data.

69 (previously presented). The apparatus of claim 68, wherein the inter-image operation means carries out the inter-image operation when the inter-image operation of the base image data has not been previously carried out.

70. (currently amended): An inter-image operation method comprising the steps of:  
carrying out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom;

recording history data on past inter-image operations; and  
storing the two or more sets of base image data and attaching the history data to the stored two or more sets of base image data;

wherein the history data is subtraction processing history data.

71. (currently amended): An inter-image operation method comprising the steps of:  
carrying out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom; and

recording history data on past inter-image operations;

wherein the two or more sets of base image data each represent a distinct base image of a patient and wherein the history data comprises one or more of a name of the patient; dates on which the two or more sets of base image data were obtained; an identification number or name of an imaged portion of the patient; and an angle of the imaging of the patient; and

wherein recording history data comprises appending history data to the two or more sets of base image data as header data.

72. (currently amended): An inter-image operation method comprising the steps of  
carrying out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom; and

recording history data on past inter-image operations;

wherein the two or more sets of base image data each represent a distinct base image of a patient and wherein the history data comprises one or more of a name of the patient; a date on which the inter-image operation is carried out; an identification number or name of an imaged portion of the patient; and an angle of the imaging of the patient;

wherein recording history data comprises appending history data to the two or more sets of base image data as header data.

73. (currently amended): An inter-image operation apparatus comprising  
inter-image operation means which carries out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom;

history data recording means for recording history data on past inter-image operations;  
means for recording the two or more sets of base image data; and  
means for attaching the history data to the stored two or more sets of base image data;  
wherein the history data is subtraction processing history data.

74. (currently amended): An inter-image operation apparatus comprising  
inter-image operation means which carries out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom; and

history data recording means for recording history data on past inter-image operations  
wherein the two or more sets of base image data each represent a distinct base image of a patient and wherein the history data comprises one or more of a name of the patient; dates on which the two or more sets of base image data were obtained; an identification number or name of an imaged portion of the patient; and an angle of the imaging of the patient;



wherein the history data recording means appends the history data to the two or more sets of base image data as header data.

75. (currently amended): An inter-image operation apparatus comprising  
inter-image operation means which carries out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom; and

history data recording means for recording history data on past inter-image operations;  
wherein the two or more sets of base image data each represent a distinct base image of a patient and wherein the history data comprises one or more of a name of the patient; a date on which the inter-image operation is carried out; an identification number of name of an imaged portion of the patient; and an angle of the imaging of the patient;

wherein the history data recording means appends the history data to the two or more sets of base image data as header data.

76. (new): The inter-image apparatus according to claim 70, wherein attaching the history data to stored two or more sets of base image data comprises appending the history data to the two or more sets of base image data as header data.

77. (new): The inter-image operation apparatus according to claim 73, wherein the history data recording means appends the history data to the two or more sets of base image data as header data.